

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original): An optical manifold comprising:
  - a unitary body having an input end and an output end;
  - said input end having a plurality of input openings in a first ordered arrangement;
  - said output end having a plurality of output openings in a second ordered arrangement which differs from that of said first ordered arrangement;
  - said unitary body further comprising a plurality of integrally formed passageways, wherein each of said passageways connects a single input opening with a single output opening.
2. (Original): The optical manifold of claim 1, wherein the unitary body is formed of a polymeric material.
3. (Original): The optical manifold of claim 2, wherein the unitary body contains voids to reduce the amount of polymeric material required.
4. (Original): The optical manifold of claim 1, wherein the unitary body is formed of a metal.
5. (Original): The optical manifold of claim 1, wherein the unitary body is formed by an additive manufacturing process.
6. (Original): The optical manifold of claim 1, wherein the passageways have been smoothed by abrasive laden slurry polishing.
7. (Original): The optical manifold of claim 1, wherein at least one ruggedized cable attachment is provided at the input end or the output end of the unitary body.

8. (Original): The optical manifold of claim 7, wherein the at least one ruggedized cable attachment anchors load bearing portions of a ruggedized cable to the unitary body to provide strain relief.
9. (Original): The optical manifold of claim 1, wherein at least one multifiber termination has been made at the input end or the output end of the unitary body.
10. (Original): The optical manifold of claim 1, wherein the unitary body has been enclosed within a protective housing.
11. (Original): The optical manifold of claim 10, wherein at least one optical connector is anchored to the protective housing.
12. (Original): The optical manifold of claim 1, wherein the unitary body has been mounted to a plug-in card to form an optical shuffle module.
13. (Original): The optical manifold of claim 12, wherein the optical shuffle module has been rack mounted.
14. (Currently Amended): An optical manifold comprising:  
a body having plurality of plates, each of said plates having an input end and an output end;  
each plate being formed with a plurality of channels spanning the entire length of each plate from the input end to the output end;  
said body being constructed by arranging the plurality of plates in a stacked configuration to provide a plurality of input openings at the input end and a plurality of output openings at the output end, wherein each of said channels forms a passageway connecting a single input opening with a single output opening, and wherein the plurality of input openings are in a first ordered arrangement and the plurality of output openings are in a second ordered arrangement that differs from the first ordered arrangement.

15. (Original): The optical manifold of claim 14, wherein the at least one passageway is non-linear.

16. (Original): The optical manifold of claim 14, wherein at least two channels intersect on at least one plate.

17. (Original): The optical manifold of claim 14, wherein the plates are substantially rigid.

18. (Original): The optical manifold of claim 14, wherein the plates further comprise an alignment means for indexing the plates one to another.

19. (Original): The optical manifold of claim 14, wherein the channels are formed by milling each of said plates.

20. (Original): The optical manifold of claim 14, wherein the channels are formed by injection molding each of said plates.

21. (Original): An optical manifold comprising:

- a body having a plurality of hollow tubes, each of said tubes having an input end and an output end;

- a first endplate having a plurality of input openings in a first ordered arrangement;

- a second endplate having a plurality of output openings in a second ordered arrangement which differs from said first ordered arrangement;

said body being disposed between said first endplate and said second endplate, wherein each of said hollow tubes connects a single input opening with a single output opening.

22. (Original): The optical manifold of claim 21, wherein the tubes are flexible.

23. (Original): The optical manifold of claim 21, wherein the tubes are substantially rigid.

24. (Original): The optical manifold of claim 23, wherein the tubes are formed of two semi-cylindrical halves.

25. (Original): The optical manifold of claim 21, wherein the tubes are color-coded.